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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,485	08/16/2001	Timo Pinola	P 282822 T299007US/PYK/	9933

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PILLSBURY WINTHROP, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER	
NGUYEN, SIMON	
ART UNIT	**PAPER NUMBER**
2685	9

DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/930,485	PINOLA, TIMO	
	Examiner	Art Unit	
	SIMON D NGUYEN	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 November 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-24 and 26-36* is/are rejected.

7)☒ Claim(s) *7 and 25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 5-6, 8, 10-20, 23-24, 26, 28-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naslund (6,223,031) in view of Vambaris (5,930,707).

Regarding claim 1, Naslund discloses a method for testing channel of a base station in a cellular radio network (fig.1, 5, abstract), the method comprising: directing by a base station controller (#BSC1), a base station (BS) transmits a control channel on at least one physical channel, directing a fixed receiver box (#201 of fig.5) to receive and measure the physical channel, transmitting a measurement report back to the controller, selecting good channel by the controller, and directing the base station to use at the good channel (fig.5, column 8 line 42 to column 11 line 8). However, Naslund does not specifically disclose that the tester located in a cell associated with the base station.

Vamaris discloses a system for monitoring the quality of audio signals (abstract) in which each base station having a test unit for measuring the quality of audio signals, wherein the test unit located in a cell associated with the base station but apart from the base station for receiving and transmitting signals to the base station (fig.1). Therefore, it would have been obvious to one skilled in the art at the time the invention was made

to modify the Naslund system with the teaching of Vamaris to directly involve in testing channels associated with the base station in order to improve the frequency planning in the system.

Regarding claims 19, this claim is rejected for the same reason as set forth in claim 1.

Regarding claims 2 and 20, in the modified Naslund discloses the base station tester is connected to the BSC via a fixed data network (figs.1, 5).

Regarding claims 5 and 23, in the modified Naslund system, Vambaris discloses the base station tester (#3 of fig.1) is connected to the controller 1 via a wireless bi-directional data transmission link (fig.1).

Regarding claims 6 and 24, Naslund discloses the base station tester is controlled in real time (dynamic channel allocation) (column 3 lines 39-48)).

Regarding claims 8 and 26, Naslund discloses the base station tester is capable of receiving physical channels implemented in different ways (fig.5, column 8 line 42 to column 9 line 54).

Regarding claims 10-11 and 28-29, in the modified Naslund system, Naslund discloses the channel configuration is performed when building the network at regular intervals (column 2 lines 32-48).

Regarding claims 12, 14, 17, 30, 32, and 35, in the modified Naslund system, Naslund disclose a wireless system in which the base station having a measurement receiver (#201 of fig.5) for signal quality determination to be used in the system (figs. 1,

5, column 8 lines 42-67), wherein the system includes micro cells and macro cells (fig.3, column 13 lines 40-44) and a BCCH (column 2 line 1).

Regarding claims 13 and 31, the Naslund system discloses the base station is office base station (column 2 lines 63-65).

Regarding claims 15 and 33, in the modified Naslund system, Naslund discloses the BSC controls all activities in the base stations including the measurements of channels (figs.1, 5, column 11 lines 1-8).

Regarding claims 16 and 34, in the modified Naslund system, Naslund discloses the system includes a TDMA system with time slots (column 14 lines 50-54).

Regarding claims 18 and 36, in the modified Naslund system, Naslund discloses the base station tester placed in the premises of the user of the network (fig.5).

3. Claims 9 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naslund (6,223,031) and Vambaris et al. (5,830,707), and further in view of Molinari et al. (6,308,065).

Regarding claims 9 and 27, the modified Naslund does not specifically disclose the base station uses various power levels.

Molinari discloses the base station uses various power levels in transmitting the physical channel (column 7 line 52 to column 8 line 20). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have the modified Naslund, modified by Molinari in order to improve the channel allocation in the communication system.

4. Claims 3-4 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naslund (6,223,031) in view of Vambaris et al. (5,830,707) and further in view of Rahman (6,445,916).

Regarding claims 3-4 and 21-22, the modified Naslund system fails to disclose the network including an IP network and the base station tester has its own IP address.

Rahman discloses a communication system in which the BS controller performs channel allocation to each base station based on uplink and downlink channel measurement at mobile stations and the base station (fig.1) wherein the channel measurer at the base station and the mobile stations having IP addresses (column 4 lines 36-50, column 5 lines 35-48). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have the modified Naslund system, modified by the teaching of Rahman to assign an IP address to each base station tester in order to easily track signal performance, faster for service evaluation that can reliably operate in a changeable quality of service environment.

Allowable Subject Matter

5. Claims 7 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 7 and 25, the prior art of record fails to disclose a receiver box (channel measurement box) use a directed antenna beam in receiving one after the other a channel in various geographical locations.

Response to Arguments

6. Applicant's arguments with respect to claims 1-6, 8-24, 26-36 have been considered but are moot in view of the new ground(s) of rejection.

The new added limitation "receiver box located in a cell associated with the base station but apart from the base station" is disclosed by Naslund and Vambaris, in which the Naslund reference discloses the frequency planning (configuration) (column 10 lines 61-62) in a base station wherein frequencies are transmitted from the base station to the test unit which is apart from the base station, and wherein Vambaris discloses the receiver box (test unit) is associated with the base station but apart from the base station (fig.1).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (703) 308-1116. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Hand-delivered response should be brought to Crystal Park II,

2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Simon Nguyen

January 12, 2004

Simon Nguyen

EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600